Application/Control Number: **∮∮**/807,732

Art Unit: ***

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- 1. A method of recovering a received packet comprising the steps of:
 - a) generating a soft value for each bit of the received packet;
 - b) storing the soft values of the received packet;
 - c) performing an error check on the received packet; and
 - d) responsive to detection of an error:
 - i) receiving a retransmission of the packet;
 - ii) generating a soft value for each bit of the retransmitted packet;
 - iii) combining each generated soft value with the respective last stored soft values:
 - iv) storing the combined soft values;
 - v) performing an error check based on the thus combined soft values; and
 - vi) responsive to detection of an error repeating steps i) to v).
- 2. The method of claim 1 wherein the step of combining each soft output value of the retransmitted packet with the respective stored soft output value comprises adding the respective soft values.
- 3. The method of claim 1 further comprising the step of determining a hard value from the soft values of the received packet.
- 4. The method of claim 3 wherein the error check of step c) is performed on the hard value.
- The method of claim 1 further comprising the step of determining a hard value from the combined soft values.
- The method of claim 5 wherein the error check of step v) is performed on the hard value.
- 7. The method of claim 5 wherein if no error is detected in step c) the hard value forms an output.
- 8. The method of claim 1 wherein if no error is detected in step v) the hard value forms an output.
- 9. The method of claim 1 further comprising the step, prior to the step a) or i), of equalising the received packet.

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 The method of claim 1 wherein the error check comprises a cyclic redundancy code check.

- 11. The method of claim 1 wherein in step vi), steps i) to v) are repeated a prodetermined number of times.
- 12. The method of claim I wherein in step vi), steps i) to v) are repeated for the maximum number of retransmissions allowed by the system, or for the maximum delay per packet.

Claim 13 (canceled)

- 14. A receiver comprising:
- a) input circuitry for receiving a transmitted packet;
- b) generating circuitry, connected to the input circuitry, for generating a soft value for each bit of the received packet;
- c) storage circuitry for storing the thus generated soft values;
- d) error checking circuitry for performing an error check on the received packet; and
- e) combining circuitry, wherein responsive to detection of an error:
 - i) the input circuitry receives a retransmission of the packet;
- ii) the generating circuitry generates a soft value for each bit of the retransmitted packet;
- iii) the combining circuitry combines each generated soft value with the respective stored soft values;
- iv) the storage circuitry stores combined soft values in place of the stored soft values;
- v) the error checking circuitry performs an error check based on the thus combined soft values,
 - vi) wherein i) to v) are repeated responsive to detection of an error in v).

Claim 15 (canceled)